



Title IV WAN Retirement Business Case

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Prepared by: Title IV WAN Retirement

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Change History Log

Date	Change Description	Author
2/13/2001	Initial draft of business case.	Sharon Barfield
2/15/2001	Updated draft with Core Team comments	Sharon Barfield
2/12/2001	Updated with revised Billing Business Case solution	Sharon Barfield
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1. Executive Summary

The objective of this business case is to support the retirement of the Title IV Wide Area Network (WAN). The system, which became operational in 1994, incurred approximate operating expenses of \$12.5 million in fiscal year 2000. The case for the retirement of WAN estimates a project completion date of December 2001.

The Title IV WAN

The Title IV WAN contract is composed of seven major services, four of which will need to be retained after the contract expires. The most recognized service in the Title IV WAN contract is the facilitation of data transmission between SFA's customers and the various SFA Application Systems. This is accomplished via the use of General Electric Information Services' (GEIS) value added network (VAN). The GEIS VAN supports data transmissions between 19,377 destination points (representing 7,000 SFA customers) and seven SFA Application Systems. This service incurred approximate operating expenses of \$5.2 million in fiscal year 2000.

In addition, Title IV WAN provides Participation Management services; Product Distribution services; a Billing system; Lender Form 799 Reporting services; Conference Support; and Customer Service.

Retirement Tasks

The Conference Support and Customer Service functions within Title IV WAN are being addressed by other SFA initiatives. The remaining five services are the subject of this business case. All except the Billing system must be retained and will therefore be incorporated into the either existing contracts (e.g CPS) or new contracts. Business functions supported by Student Financial Assistance and its current trading partners will not be impacted by the retirement of the WAN.

Savings

The WAN IPT team has determined that a total net savings of over \$21 million will be realized over the five years from retirement of the data transmission service of the WAN contract. This savings will be realized beginning with fiscal year 2002. Table 1 depicts the cumulative savings for each fiscal year from 2001 through 2006. *SFA will realize additional savings of \$1 million dollars over the 5 year period, which is not included in the table below. This savings is a result of the consolidation of the participant management and product distribution into CPS, the elimination of the billing system, and the elimination of sending participation/enrollment files to the CPS.*

Table 1–Title IV WAN Retirement Data Transmission Savings

Operating Costs*	FY01	FY02	FY03	FY04	FY05	FY06	Totals
TIV WAN Costs	\$5,224,600	\$5,678,826	\$6,038,019	\$6,256,053	\$6,484,555	\$6,531,567	\$36,213,620
Modernized Costs	\$5,224,600	\$1,777,471	\$1,764,941	\$1,877,576	\$2,010,902	\$2,130,974	\$14,786,464
Savings	\$0	\$3,901,355	\$4,273,078	\$4,368,477	\$4,473,653	\$4,400,593	\$21,417,156
*Operating costs represented in current dollars							



2. Project Information

Name: Title IV WAN Retirement

Project Sponsor: Kay Jacks (SFA Schools Channel)

Project Lead: Keith Wilson (CIO)

3. Project Description

Describe the need for change (the business problem to be addressed).

The Student Financial Assistance (SFA) office is identifying ways to reduce the costs of delivering student financial aid. The current Title IV Wide Area Network (WAN) contract is scheduled to expire on September 30, 2001. SFA does not plan to renew this contract; however several of the services will need to be continued.

What is the purpose of the initiative?

The purpose of this initiative is to identify potential solutions for continuation of each of the following services and to develop high-level project plans for implementation of the recommended solution for each:

- Data transmissions (currently provided via the GEIS VAN, also known as the Student Aid Internet Gateway (SAIG))
- Participation Management
- Product Distribution
- Billing
- Lender Reporting (799)

An IPT Core Team was formed to lead this effort. The Core Team is composed of representatives from each affected SFA Channel, the CFO and CIO organizations, and the Modernization Partner. Five sub-teams were formed to work on business cases for each of the remaining services. Each team was tasked with developing alternatives and recommending a solution that would result in overall savings to SFA while ensuring minimal disruption of services. Separate business cases were developed for each of the services listed above. Those business cases are included as attachments.



What is the scope of the initiative, including what it is not?

The scope of this initiative is to facilitate the retirement of the WAN contract. This requires identifying those services that must be retained and recommending solutions for their continued operation. Those services were identified above. The following outlines the scope of the initiative for each of the retained services.

Data Transmissions (This function will be referred to as SFA to the Internet in this business case)

- Move SFA data transmissions off the proprietary network and to the Internet
- Retire Title IV On-line query system and replace with a web solution

This initiative does not include the following:

- WANC Participation Management Screens

Participation Management

- Ensure continuation of participation management services once the Title IV WAN contract expires on September 30, 2001.

This initiative does not include:

- Analysis necessary to modernize the existing participation management system from a process and core component perspective. This analysis will be proposed in future initiatives.

Product Distribution

- Operation and maintenance of the SFA Download Web site (SFA software and documentation)
- New user mailings of hardcopy software diskettes and technical manuals
- Distribution of software Desk References

Billing

- Describe the activities necessary for SFA to take over financial responsibility of the products currently billed to non-ED users, thus eliminating the Centralized Billing System by September 30, 2001 in a manner that does not negatively impact users of the SAIG.

This initiative does not include:

- Elimination of billing SFA for services rendered. An overriding assumption in this business case is that each operating partner who performs services for SFA will develop a method to capture statistical information in order to bill SFA for these services.



Lender (Form 799) Reporting

- Determine an alternate method of providing this service for FMS through transferring ownership of the 799 mailbox to FFEL.

This initiative does not include:

- Reengineering the overall Lender Reporting System

What is the start date and end date of the initiative?

Preliminary approval has already been received to begin planning for the migration of users from the GEIS VAN to the Internet as part of the SFA to the Internet solution for data transmissions. The planned start date for migration of the remaining services is April 20, 2001. The planned end date for the migration of Participation Management and Product Distribution to another contract, transition of moving the 799 Reporting mailbox to FFEL, and retirement of the Billing system is September 30, 2001, which coincides with the planned expiration of the Title IV WAN contract. However, it is anticipated by this team that migration of all users to the Internet for data transmission will take through December 2001. Risk factors which may impact this schedule are described in more detail in the Risks section.

What other business areas/external groups are affected by the implementation of this initiative and how are they affected?

For each of the services, the groups impacted by implementation of the recommended solution are identified below.



1. SFA to the Internet

- SFA - Manage transition of large user base, affects all Title IV application systems, exposure to reliability and availability of Internet.
- SFA end-users (schools, guarantee agencies, state agencies and third party service provider) - Non-PC users install new software and update existing job streams; PC users download and install new version of EDconnect from SFAdownload.ed.gov; and all destination points must have an Internet connection to send/receive data.
- Students (FASFA Express users) - Currently FASFA Express uses the GEIS VAN for transmissions, and the software will be changed to use the new system. The student will be required to download a new version of software from SFAdownload.ed.gov.
- Title IV Application Systems (CPS, NSLDS, DL Origination, DL Servicing, RMFS, PELL, and Campus-Based) - Participate in transition planning activities, install software upgrade (EasyAccess) and modify existing job streams (modify based on SFA to the Internet Title IV Application Systems Requirements), support pilots, beta test and integration test.
- Virtual Data Center - Participate in transition planning activities, install & support hardware/operating system (based on SFA to the Internet VDC Requirements), support system testing, installation testing, and beta tests. Will need to remove GEIS connectivity at conclusion of implementation.
- CPS/WAN Tech Support Call Center - Learn new administrative system and procedures to support Title IV destination points migrating to the new system.

2. Participation Management

- SFA – requires agreement from Student Channel staff to assume responsibility for this sub-system.
- SFA Acquisitions and Contract Performance staff who would be responsible for documenting these tasks and incorporating them via a task order into the CPS contract.
- SFA Operating Partner for CPS – requires agreement from NCS Pearson to incorporate this sub-system into the existing CPS contract

3. Product Distribution

- SFA – requires agreement from Student Channel staff to assume responsibility for this sub-system.
- SFA Acquisitions and Contract Performance staff who would be responsible for documenting these tasks and incorporating them via a task order into the CPS contract.
- SFA Operating Partner for CPS – requires agreement from NCS Pearson to incorporate this sub-system into the existing CPS contract

We anticipate that there would be minimal (if any) affect to the following groups:

- Title IV Application Systems (NSLDS, QAP, FISAP, DL who provide the software). Instead of providing the software to the TIVWAN contractor, they would be notified to provide the software to the CPS contractor
- Virtual Data Center, which will be advised of the change in contacts for this Web site



- School & Student Channel Call Centers that will need to be advised that these products are being moved from the TIVWAN contract to the CPS contract
- SFA end-users (schools, guarantee agencies, state agencies, and third party service providers) will call the (800) 330-5947 phone number under the newly combined CPS/WAN Tech Support call center should they experience problems with downloading, etc.

4. Billing

- SFA
 - Requires agreement on the elimination of the Centralized Billing System requirement. It requires agreement from CIO Channel staff to assume financial responsibility for kilocharacter transmissions and On-Line Query connect time currently invoiced to non-ED users until all SAIG users have converted to the Internet transmission solution.
 - Requires agreement from the Student Channel staff to assume financial responsibility for enrollment and hardcopy distributions of software and documentation currently invoiced to non-ED users.
 - It is assumed that SFA will be invoiced for all new products.
- SFA end-users (colleges and schools, guarantors, state agencies, lenders, and third party service providers) will no longer be invoiced for Title IV processing. All services will be provided to them free of charge. This should result in increased customer satisfaction.
- School Channel Call Centers will no longer receive calls from users regarding invoices received.
- SFA Operating Partners – CPS no longer needs to create and send the billing file to TIV WAN. Although not directly affected, the other SFA Operating Partners should be made aware that this service is being eliminated.

5. Lender (799) Reporting

- No other business areas or external groups will be affected by this initiative

What systems are impacted by the implementation of this initiative and how are they impacted?

For each of the services, the systems impacted by implementation of the recommended solution are identified below.

1. SFA to the Internet

- EDconnect Software - EDconnect software will be modified to call the EasyAccess2000 DLL to perform necessary application functions
- Open*Net System - Title IV destination points will be moved off this system. The Open*Net system will be retired
- Enterprise System - Title IV destination points will be moved off this system. The Enterprise system will be retired
- SFAdownload.ed.gov - Web site will be modified to post the updated EDconnect software to it to make it available to users
- Title IV WAN sub-systems - Review for impacts and possible system integration (Archive, MIS reporting, Process Control and Participant Management).



2. Participation Management

- The proposed solution to move the participation management system and its current contract deliverables to the CPS contract will not impact any systems in an adverse way. All these existing systems can remain in place and operational on the existing infrastructure because the CPS and TIV WAN contracts are with the same contractor. Therefore, relevant and key team members can be moved under the CPS project in regards to these services. Future modernization of the Participation Management system will impact several systems and will be addressed in future initiatives.

3. Product Distribution

- No system would be impacted by this implementation other than the CPS and TIV WAN systems. Other systems are impacted only by having to be aware of this change and know whom to contact under the CPS contracts. All system entities currently providing software and technical manuals to TIVWAN for posting to the Web site and for manual distribution will continue to provide such software and technical manuals. They will merely provide it to the same vendor (NCS Pearson), but under a different contract (CPS). The Web site is already developed and functioning satisfactorily and resides on NT servers at the Virtual Data Center (VDC) in Meriden, Connecticut. There will be no change in the technologies used for this project.

4. Billing

- JCL in the CPS system will need to be modified to prevent the creation of the billing file that serves as input to the TIV WAN system.
- Data in the TIV WAN product tables will need to be modified to identify the current user products as ED-paid products and the user price will be zeroed out. The production schedule will be modified to eliminate the input of the CPS billing file.
- Modifications to the Help Text on the SFA Enrollment web site will need to reflect the fact that user billing has been eliminated. The same is true for the SAIG Enrollment document and the EDconnect Installation Guide.
- Impact to the TIV WAN Participant Management system is dependent upon the requirements SFA sets for viewing and archival of non-ED billing data.
- The requirement to archive the billing data will need to be considered when the Title IV WAN system is retired.

5. Lender (799) Reporting

- No systems are impacted by the implementation of this initiative.



What business processes are impacted by the implementation of this initiative and how are they impacted?

For each of the services, the business processes impacted by implementation of the recommended solution are identified below.

1. SFA to the Internet

- This initiative will impact existing business processes of SFA data transmission (telecommunications support) and On-line Query, which are currently administered under the Title IV WAN contract.

2. Participation Management

- The proposed solution to move the participation management system and its current contract deliverables to the CPS contract will not affect these business processes in an adverse manner.
- The participation files will no longer need to be transmitted to CPS since they will reside there already.

3. Product Distribution

- There would be no major impact to our business processes.

4. Billing

- CPS will no longer create a billing file for input into the TIV WAN billing system.
- The process by which CPS currently invoices SFA for non-ED user products will be eliminated. Reimbursement to Treasury when funds are received from users will be eliminated also.
- The SAIG Enrollment Document and the EDconnect Installation Guide contain billing information for users. These documents will be updated to accurately reflect costs that SFA will absorb for SAIG users. We recommend that the Enrollment Form be updated around October 1 as part of the annual update activities and that the EDconnect Installation Guide be updated and distributed with the upcoming Internet release of the software.
- The processes by which TIV WAN incorporates billing information from CPS with TIV WAN data, creates and mails invoices to non-ED users, collects funds back from the users, and tracks invoice status data will cease. Eliminating invoicing of non-ED users will also reduce the amount of administrative effort in the TIV WAN contract for handling incoming calls regarding billing and contacting customers with payments in arrears.
- Following the expiration of the contract, the remaining balance in the TIV WAN loss reserve fund will be refunded to the government or SFA will need to reimburse NCS Pearson for services not paid for by users that exceed the remaining balance in the loss reserve fund.
- SFA Call Centers can eliminate the need to train representatives on invoice calls.

5. Lender (799) Reporting

- There would be no major impact to our business processes.



4. Technologies Used

List the proposed technologies that will be used to implement this project

The SFA to the Internet solution is the only one which will require new technology for implementation. Those technologies are provided in the following table.

Name/type	Proposed use	Has technology been used at SFA before? Where?	Does Technology fit SFA's Architecture Standard? Explain.	Does SFA have the technical expertise to implement this technology? Why?
bTrade.com's EasyAccess (MF, mid-range, PC)	Client used by SFA constituents to compress, secure and encrypt SFA data transmissions.	No. However, SFA constituents use Comm-Press component to compress data.	No. Provides interface to SFA business applications. Needs to be added to SFA's Architecture Standard.	Yes. EasyAccess2000 implementation is similar to implementing Comm-Press software.
bTrade.com's SecureManager (Win95/98/2000 or NT, with ODBC driver and connection, such as Oracle)	Manage SFA constituents and trading relationships. Provides web interface for mailbox management.	Yes. SFA has experience with ED-ENTER.	No. Provides interface to SFA business applications. Needs to be added to SFA's Architecture Standard.	Yes. Will use VDC architecture.
bTrade.com's SecurePortal	Store and forward mechanism.	Yes. SFA has experience with ED-ENTER.	No. Provides interface to SFA business applications. Needs to be added to SFA's Architecture Standard.	Yes. Will use VDC architecture.



Name/type	Proposed use	Has technology been used at SFA before? Where?	Does Technology fit SFA's Architecture Standard? Explain.	Does SFA have the technical expertise to implement this technology? Why?
bTrade.com's EasyAccess API.	EasyAccess client 'C' callable API.	Yes. EDconnect software calls existing API's.	No. Provides interface to SFA business applications. Needs to be added to SFA's Architecture Standard.	Yes. SFA currently has applications calling API's.
EDconnect 32-bit Software	SFA constituents (PC platform use EDconnect to send and receive data.	Yes. SFA constituents currently use EDconnect to send and receive data.	No. Provides interface to SFA business applications. Needs to be added to SFA's Architecture Standard.	Yes. Resources are available.
SSL 3.0	Security protocol used by EasyAccess2000.	Yes. SFA web sites use this technology.	Yes. SSL 3.0 is an industry standard.	Yes. SFA web sites use this technology.

5. Benefits

The recommended solutions for the remaining services will result in an overall reduction in costs to SFA as well as ensuring continued customer satisfaction by providing no disruption in the retained services. The reduced unit costs will be realized as a result of the implementation of the SFA to the Internet initiative which will reduce costs associated with current SFA data transmissions. The benefits of the initiative will provide SFA with a non-intrusive solution for constituents, reduce the overall cost of delivering student aid, and reduce operating costs through consolidation of operations and systems. SFA will begin to realize these benefits after the first Title IV destination point has converted to the Internet solution (e.g., kilo-character charges reduce with each destination point migrated to the Internet).

While elimination of the Centralized Billing System will require that SFA assume financial responsibility for Enrollment and Distribution of software and documentation currently paid by non-ED users, SFA is expected to decrease overall operational costs an average of \$27,000 per year through FY 2005.

Consolidating the Participant Management System into the CPS contract will eliminate the need for transferring files between contracts and save SFA approximately \$228,000 annually.



Implementation of the recommended solutions for the remaining services. Product Distribution, and Lender Reporting will not result in reduced unit costs; however, they are cost effective solutions which will ensure continued customer satisfaction while meeting the objective of retiring the Title IV WAN contract.

Reduce Unit Cost

Quantified Benefit (\$)	How will benefit be measured/realized?	When will benefit be realized?
SFA to the Internet: Cost will be reduced from \$0.0850 per kilo-character to \$0.0276 per kilo-character. Calculation is based on FY2000 kilo-character volume of 51,246,663.	SFA to the Internet: Kilo-character volume will be captured and the per kilo-character charges calculated annually and provided to SFA in an MIS report.	SFA to the Internet: SFA will begin to realize benefits when the first destination point migrates to the Internet. When all Title IV destination points have migrated to the Internet solution SFA will realize the full benefit.
Participant Management: SFA annual costs will decrease \$228,000 per year when the participant management system is consolidated into the CPS.	Participant Management: SFA will spend less on monthly operational costs.	Participant Management: Monthly, upon consolidation into the CPS.
Assumptions		
<ol style="list-style-type: none">SFA to the Internet: Quantified Benefit (\$) is based on Actual WAN FY2000 costs currently billed under the Title IV WAN contract. These costs totaled \$4.726 million in FY2000 (which is a summary of the network-related costs in bullets 2, 3, 4, 5, 6, 7 and 8 below)SFA to the Internet: Total FY2000 Network Development, test plan, documentation and advisory group - \$250,000SFA to the Internet: Total FY2000 On-line Query - \$630,000SFA to the Internet: Total FY2000 Open*Net and Enterprise, data transmission charges and telecommunications support (\$2,300,000 of the \$2,650,000 are kilo-character charges; \$350,000 related to telecomm support).SFA to the Internet: Total FY2000 Enterprise trading partner and mailbox administration - \$190,000SFA to the Internet: Total FY2000 EDconnect development and support - \$420,000SFA to the Internet: Total FY2000 System maintenance and support - \$106,000SFA to the Internet: Total FY2000 VDC Enterprise Costs - \$480,000SFA to the Internet: Assumes CPS Query is available on the Web and no longer needs the GEIS TPX systemSFA to the Internet: Assumes NSLDS Query is available on the Web and no longer needs the GEIS TPX system		



Quantified Benefit (\$)	How will benefit be measured/realized?	When will benefit be realized?
<p>11. Participant Management: The existing participation management system, as it exists under the current Title IV WAN contract, will remain in the same state when moved to the CPS contract. This will assist in introducing minimal change for the transition and help to keep effort costs down.</p> <p>12. Participant Management: Instead of billing participation management products directly to a ED – WAN invoice, those same relevant deliverables will be billed to ED – CPS either through a separate invoice or combined with the existing CPS invoice.</p> <p>13. Participant Management: The CPS contract/project does not need these deliverables more often than once a month.</p> <p>14. Participant Management: NCS Pearson Requirements and Testing Engineers for the transition/implementation and maintenance tasks/deliverables would perform requirements and system testing. This will assist in keeping effort down since that staff has extensive experience with the current system in regards to requirements and testing.</p> <p>15. Participant Management: Assumes 4% escalation</p> <p>16. Participant Management: Cost to perform annual rollover = \$1,879,000</p> <p>17. Participant Management: Estimated annual costs to operate system = \$4,638,000</p> <p>18. Participant Management: Rollover of the participation management system is still needed on a yearly basis. Appropriate deliverables are included in costs above.</p>		



Increase Customer Satisfaction

Retained Service	Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
SFA to the Internet	Provide SFA PC constituents a non-intrusive solution that builds upon the EDconnect interface.	Use "demo" system to gather feedback early in the process, and conduct survey after beta test.	After the first SFA PC constituent has migrated to the Internet.
SFA to the Internet	Provide SFA non-PC constituents a non-intrusive solution, which involves an upgrade to existing jobs (upgrade to compression & decompression steps).	Use "demo" system to gather feedback early in the process, and conduct survey after beta test.	After the first SFA non-PC constituent has migrated to the Internet.
SFA to the Internet	Provide SFA constituents a web browser solution (SecureManager) to view and manage mailbox contents.	Use "demo" system to gather feedback early in the process, and conduct survey after beta test.	After the first SFA constituent has migrated to the Internet.
SFA to the Internet	Provide SFA constituents a solution that reduces operating expenses (no kilo-character charges).	Constituent won't be billed for SFA data transmissions.	After the first SFA constituent has migrated to the Internet solution.
Participation Management	Provide uninterrupted participation management services.	Existing services (i.e. web enrollment site, hardcopy enrollment documents, etc.) will continue without change come September 30, 2001.	Upon successful transition of participation management system to proposed recommendation.



Retained Service	Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
Product Distribution	The transitioning of these products to the CPS is primarily aimed at maintaining customer satisfaction with the continuation of these services. We anticipate that added customer and SFA employee satisfaction will be experienced due to the consolidating of these efforts under a 'single roof,' which will result in the simplification of problem resolution. Problems can be resolved by a single contractor rather than trying to figure out if the problems were the responsibility of the CPS or TIVWAN.	There will be no increase in the number of complaints due to the loss or degradation of service as a result this transition.	Within one month after the transition has been accomplished, prior to September 30, 2001.
Billing	Provide free services to SAIG user community while maintaining existing service level commitments.	Customer satisfaction surveys.	Upon elimination of the Centralized Billing System (September 30, 2001).
Lender Reporting	Provide uninterrupted service.	Existing services will continue without change come September 30, 2001.	October 1, 2001
Assumptions			
SFA to the Internet	<ol style="list-style-type: none"> 1. Assume Title IV destination points have an existing ISP connection, and will not incur additional operating costs. 2. Assume Title IV destination points (PC and non-PC) meet minimum platform requirements to perform Internet transmissions. 		
Product Distribution	<ol style="list-style-type: none"> 3. Our assumption is that the merging of the CPS and TIVWAN call centers under the 'one call' SFA Tech call center (and using the existing TIVWAN toll free number) will go into affect prior to September 30, 2001. 4. We also assume that NCS/CPS willingly accepts this additional work. 		



Increase Employee Satisfaction

Retained Service	Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
SFA to the Internet	Provide SFA with increased efficiencies (no bridge) and reduction in duplicate systems (one store and forward system).	Conduct survey within SFA channels and track incident reports and compare with historical information.	After Open*Net and Enterprise systems are retired.
SFA to the Internet	Provide SFA with simplified tracking and oversight by consolidating SFA data transmissions and hardware/software at the VDC.	Conduct survey within SFA channels. Track against historical information.	After Open*Net and Enterprise systems are retired.
SFA to the Internet	Provide SFA with cost reductions by implementing COTS solution.	Track ease of future system/application integration initiatives (e.g., MQ Series).	After Open*Net and Enterprise systems are retired.
Participant Management	Provide SFA and the related Title IV Application Systems uninterrupted participation management services they currently	Existing services (i.e. participation files) will continue without change come September 30, 2001.	Upon successful transition of participation management system to proposed recommendation.



Retained Service	Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
Product Distribution	The experienced TIVWAN staff currently managing this site and handling these products are already employed by NCS Pearson, so we anticipate these individuals will continue to perform the same duties, but will do so under the CPS contract. Maintaining these employees will eliminate any significant loss of experience or service. SFA employees will, therefore, not experience any significant problems in monitoring these tasks under the CPS contract.	Student Channel staff (the CPS COTR) will not notice or experience an increase in problems as a result of this transition.	Immediately upon implementation of this transition.
Billing	Elimination of inquiries on invoices by SAIG users.	Statistical reports are available from NCS Pearson Call Management System.	Reduction of calls should begin one month after elimination of Centralized Billing System. Full elimination is expected a few months after non-ED invoicing stops.
Billing	Provide streamlined business processes for SFA Operating Partners.	Customer satisfaction surveys.	Upon elimination of the subsystem (September 30, 2001.)
Lender Reporting	Provide SFA and the related lender reporting subsystem with uninterrupted service.	Existing services will continue without change come September 30, 2001.	May 1, 2001
Assumptions			
Product Distribution	TIVWAN (NCS) staff will be maintained by CPS (NCS).		
Billing	SFA will accept the recommendation of this business case to eliminate the Centralized Billing System.		



Estimated overall dollar amount of all benefits listed above.

Benefits of Recommended Solutions							
Quantified Benefits							
	BY (2001)	BY+1 (2002)	BY+2 (2003)	BY+3 (2004)	BY+4 (2005)	BY+5 (2006)	Total
Operating Costs of Legacy System	\$5,225,000	\$5,679,000	\$6,038,000	\$6,256,000	\$6,485,000	\$6,532,000	\$36,215,000
Operating costs of Modernized Solution	\$5,225,000	\$1,777,000	\$1,765,000	\$1,888,000	\$2,011,000	\$2,131,000	\$14,975,000
Net Savings	\$0	\$3,902,000	\$4,273,000	\$4,368,000	\$4,474,000	\$4,401,000	\$21,418,000
Cumulative Net Savings	\$0	\$3,902,000	\$8,175,000	\$12,543,000	\$17,017,000	\$21,418,000	\$21,418,000
Assumptions							
<ol style="list-style-type: none">1. Assumes BY is fiscal year 2001 (October 1, 2000 through September 30, 2001)2. SFA to the Internet: Operating Costs for Modernized System for BY assumes Internet migration will have started August 2001, and SFA will have benefited from reduction in kilo-character charges. The benefit will be offset by the cost of operating the SFA to the Internet solution during the migration of users. All other network-related costs for BY would still be incurred.3. SFA to the Internet: FY2000 kilo-character costs were approximately \$2,300,000, which represents a 35% increase in volume and costs from FY1999. Assume future volume will increase as follows (2001 - 20%, 2002 - 15%, 2003 - 10%, 2004 - 5%, 2005 – 5% and 2006 – 0%). The increases are reflected in the Eliminated Costs row4. SFA to the Internet: Assumes all application systems will migrate to the new system prior to September 30, 2001. All application systems will be the first users to migrate to the new system.5. SFA to the Internet: Assumes all destination points will have migrated to the new system by December 20016. SFA to the Internet: Included in operating costs of the Modernized Solution is the VDC Operations costs (paid by SFA). 2002 - \$423,986; 2003 – \$557,000; 2004 – \$571,000; 2005 – \$585,000; 2006 – \$595,000.7. Participation Management: Assumes a 4% annual escalation rate for costs.8. Participation Management: Costs include annual rollover costs as well as annual operation/maintenance costs.							



Benefits of Recommended Solutions

- | |
|---|
| <ol style="list-style-type: none">1. Product Distribution: Implementation costs assume current system rolls over to the CPS contract.2. Product Distribution: Assumes a 4% annual escalation rate for costs.3. Product Distribution: Costs to perform annual rollover are included in Operation Costs (\$10,000/year).4. Product Distribution: Costs to distribute hardcopy software and documentation was based on FY01 n/counts for Oct – Dec and FY00 volumes for Jan – September.5. Billing: BY (2001) cost of \$142,000 to operate under TIV WAN consists of \$120,000 for ongoing system operations plus \$22,000 to perform the annual rollover activities. 4% escalation is assumed for the outgoing years.6. Billing: Cost to Cover Services Currently Invoiced to Users is based on FY00 volumes for Enrollment and Distribution products invoiced to users. The reason the cost for 2002 is higher than 2003 is that 2002 includes \$8,000 for kilocharacter transmissions and On-Line Query connect time for users who have not converted to the Internet solution by September 30, 2001. Again, 4% escalation is assumed. |
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6. Total Cost of Ownership

What is the level of required enhancement after implementation?

For the Product Distribution, Billing, and Lender Reporting services, no enhancements are anticipated. For the SFA to the Internet and Participation Management services, the level of enhancement after implementation will be based on new requirements/enhancements requested by SFA and constituents.

What is the life span of this initiative?

The life spans of the recommended solutions for the retained services are not all the same. For SFA to the Internet, the life span is indefinite and dependent on SFA, but is expected to exceed the five-year period covered in this business case. For those services which are recommended to be moved under the existing CPS contract (Participant Management and Product Distribution), the life span will be the duration of that contract. For the Billing System and Lender (799) Reporting services, the life span is not applicable since these systems will be retired.



7. Alternatives

Describe what could be done in place of this initiative and describe the consequences of each alternative.

Retained Service	Alternative	Consequence
SFA to the Internet	Remain as-is	SFA would continue to incur data transmission charges and on-line query charges. SFA architecture would include two store and forward systems, and two data centers (VDC & GEIS).
SFA to the Internet	Non-technology solution	A non-technological solution is not applicable for this initiative.
SFA to the Internet	Enhance an existing system	SFA would need to order large-scale modifications to the Enterprise system and purchase client/server software for Internet transmission. COTS Enterprise does not accommodate header/trailer infrastructure required by Title IV application systems.
SFA to the Internet	Implement on a smaller scale	SFA would not realize total benefit of moving all SFA constituents to the same solution, and subsequently retiring Open*Net and Enterprise systems.
Participation Management	New contract/RFP	SFA would need to create a new RFP in order to house the participation management system. Given the deadline of September 30, 2001 an RFP seems unlikely to get written, approved, and submitted for bids in time. This solution would also not be cost effective to SFA given the added effort and resources that would be necessary.
Participation Management	EDS/CSC system/contract modification	The existing EDS/CSC contract has participation management pieces within it. Those could be enhanced to include the existing functionality and requirements currently housed under the Title IV WAN contract. Existing systems and relevant programs within the contract might require extensive modification in order to successfully integrate the systems and business processed currently housed within the WAN contract. Compatibility of existing infrastructure would need to be evaluated and possibly changed. Given these extensive changes and the deadline that is required, it is unlikely just a high impact and effort intensive initiative would be possible by September 30, 2001. Such changes would also likely become obsolete when the modernization phase is complete.



Retained Service	Alternative	Consequence
Participation Management	PEPS system/contract modifications	The existing PEPS contract is a key participation management system for SFA. In order to implement all of the systems, business processes, and technologies currently housed under the Title IV WAN contract extensive changes would be necessary. Existing systems and relevant programs within the contract might require extensive modification in order to successfully integrate the systems and business processes currently housed within the WAN contract. Compatibility of existing infrastructure would need to be evaluated and possibly changed. Given these extensive changes and the deadline that is required, it is unlikely just a high impact and effort intensive initiative would be possible by September 30, 2001. Such changes would also likely become obsolete when the modernization phase is complete.
Product Distribution	We could contract out for these tasks to a new vendor	Competition of contracts, however, is a time consuming and arduous process. Due to the lack of resources within SFA to focus on creating a new contract (there are so many other modernization tasks currently going on), due to the lack of time to procure a new vendor, and a lack of time for the new vendor to develop and implement the procedures needed and train its staff, it is not probable that this could be accomplished by September 30, 2001. Competition of a new contract would add unnecessary strain on SFA staff (causing employee dissatisfaction) and might result in a reduction of service to our customers (causing customer dissatisfaction). It may also result in an increase in unit costs for these products (increase in costs) from the new vendor.
Product Distribution	Split up the tasks and incorporate them into several existing contracts.	For example, let EDPUBs be responsible for mailing the hardcopy diskettes and manuals. There currently is a move to improve SFAs publication services for schools by centralizing our publication ordering system into the EDPUBs system so that FAAs don't have to check with multiple call centers to find what they need. The drawback to this idea (for the purposes of this IPT) is that another entity would still have to provide the photocopied paper documents and the diskettes to EDPUBs, as they are not printed by GPO or any other replication company. This might necessitate EDPUBS keeping a larger than necessary inventory of diskettes and publications on hand.



Retained Service	Alternative	Consequence
Product Distribution	School Channel Customer Service Call Center staff be responsible for uploading the software to the website, and an ED contractor be responsible for maintaining the website.	This splitting up of the tasks would make it harder for our customer service staff to provide good service since the handling of each of these tasks are spread across several different entities (return to the 'hair-ball' scenario). In addition, additional resources (staff) would have to be added to CSCC in order to take on this added work. It is more efficient if the same entity that uploads the software is responsible for handling inquiries pertaining to problems with the download process, there again causing a consideration for added resources.
Product Distribution	Remain-as is	This is not an option since the TIVWAN contract expires on September 30, 2001.
Product Distribution	Non-technology solution	We could discontinue the download website and return to the manual duplication and distribution of software and technical references. There would be an increase in costs and a decrease in customer service as a result of lost or damaged deliverables that are experienced by using mail services. It would also increase the amount of time required to provide these hardcopy products via any mail service. It would most certainly cost more to duplicate hardcopy diskettes and manuals as well as cause an increase in postage.
Product Distribution	Enhance an existing system	This business case does exactly that by transitioning the existing work in tack to another contract.
Product Distribution	Implement on a smaller scale	This is not an option since the distribution of all products cannot be done on a smaller scale. Service to all our customers must continue.
Billing	Contract out this task to a new vendor	<ul style="list-style-type: none">▪ The projected amount to be billed does not warrant the cost of operating the Billing System.▪ Increases risk unless new vendor subcontracts with current provider▪ Would likely result in increased costs to SFA.▪ Availability of SFA resources and length of time required to recomplete a contract add sizeable risk that this cannot be completed before 9/30/01.▪ Additional costs to SFA to eliminate this system do not warrant the cost to procure new services.



Retained Service	Alternative	Consequence
Billing	Move tasks to an existing contract, enhancing an existing system	<ul style="list-style-type: none">• The projected amount to be billed does not warrant the cost of operating the Billing System.• Possibilities include CPS and PIC.• Increases contractual paperwork to be completed.• No increase in customer satisfaction.• Ballpark estimate to rollover and operate the Centralized Billing System is \$157,000 per year.• Requires agreement from Student Channel staff to accept responsibility for this additional subsystem.
Billing	Remain as is	<ul style="list-style-type: none">• The projected amount to be billed does not warrant the cost of operating the Billing System.• Not an option, as would require extension of multiple deliverables in the Title IV WAN contract.
Billing	Non-technology solution	We could eliminate the automated billing system, but performing these activities manually would increase cost to SFA.
Billing	Eliminate the billing system	Reflected in this business case.
Billing	Implement on a smaller scale	This is not a valid option as implementation and operational costs would still occur while any services not billed to non-ED users would need to be picked up by SFA eliminated.
Lender Reporting	Remain as-is	SFA would incur mailbox traffic charges.
Lender Reporting	Non-technology solution	This is the solution proposed in this business case. FMS will be invoiced directly by GEIS \$100 per month for the mailboxing service beginning no later than 10/01/01.
Lender Reporting	Enhance an existing system	This is planned under a separate Financial Partners initiative that is scheduled for implementation Spring 2002.
Lender Reporting	Transfer to another contract.	It is not worthwhile to transfer to another contract when it will be replaced after only a few months.



8. Risks

Service	Risk	Description of Risk	Mitigation Strategy
SFA to the Internet	Schedule	A delay in one task causes a cascading delay in dependent tasks, which would delay the end date.	Fulltime software project manager will be assigned to the initiative. Project will be managed following CMM level 3 processes. Project schedule will be reviewed weekly with impacted groups and tracking & oversight provided to management. Schedule impacts will be addressed weekly and dates re-negotiated.
SFA to the Internet	Financial	ROI is impacted because total benefits can't be realized until all SFA constituents have migrated to the Internet.	Employ an Internet migration campaign, which addresses migrating SFA constituents to the Internet solution smartly & quickly. Weekly status will be provided to management on status (actual -VS- planned) of migration and possible issues.
SFA to the Internet	Financial/ Schedule	May be necessary to extend the Title IV WAN contract if all Title IV destination points have not migrated to the Internet solution by September 30, 2001.	Implementation schedule will detail migration of destination points (includes high volume destination points migrating first) to the Internet solution. During migration phase planned -VS- actual will be monitored and reported to SFA.
SFA to the Internet	Technology	Development environment not available on time at the VDC and cause impacts to system integration activities.	Develop & review requirements/implementation plan with VDC & bTrade.com early in the process to identify possible issues. Formal weekly (daily as needed) meetings will be held to address/resolve issues.
SFA to the Internet	Technology	Production environment not sized, scaled properly to handle production volume.	Plan hardware, OS, CPU, space, sizing, bandwidth and SAN requirements based on historical and future needs. Documents will be reviewed and approved by SFA, VDC and Modernization Partner (Accenture and NCS Pearson) staff.



Service	Risk	Description of Risk	Mitigation Strategy
SFA to the Internet	Scope	Requirements have been baselined but continue to change.	Project team will review requirements w/ impacted groups for approval. Upon receiving approval a baseline will be established. Changes to the baseline will be managed by the project SCCB (approval or disapproval). Approved items will be assessed and dates negotiated.
SFA to the Internet	Management	The Campus-Based system is being modernized and a concurrent effort is underway to recompute the operations and maintenance of both the existing system and the “to be” modernized system. There is a risk that task orders will not be authorized in a timely fashion to ensure both the existing and new systems are modified to handle data transmissions over the Internet.	The WAN contract would need to be extended to support this application system until their transition is complete.
SFA to the Internet	Management	Communication time (e.g., time to answer requirements-clarification questions, status of schedule) is slower than expected.	Communicate to team leads that issues need to be resolved w/in 24 hours. Formal weekly (daily as needed) meeting will be held with project leads to address/resolve issues.
SFA to the Internet	Exposure	SFA data transmissions subject to ISP failure and Internet security threats.	Develop and publicize list of recommended ISP accounts. Develop security program and take security measures to ensure privacy of data.
SFA to the Internet	End-users	End-user input is not solicited, so product fails to meet user expectations and must be reworked.	Meet with SFA constituents early in the process to learn their needs and concerns. Spend time looking for key SFA constituents to participate in the beta and publicize the success of the beta.



Service	Risk	Description of Risk	Mitigation Strategy
SFA to the Internet	End-users	End-user fails to migrate to the Internet solution as planned for a variety of reasons (e.g., no ISP, staff, and operating system requirement).	Develop an aggressive migration campaign to quickly and smartly move end-users to the Internet. Assign PC and non-PC leads to lead migration efforts and provide status reporting to SFA. Provide single-point of contact for end-user.
Participation Management	Schedule	With a fast approaching deadline transition plans need to be defined quickly. The recommended solution will help with minimal transition tasks to perform, but interaction with other IPT sub-teams and their core components will directly affect the participation management system. With the participation management system intertwined with other sub-systems under WAN, will need to have clear plans for those remaining sub-system transition/tombstone plans.	Create project team, consisting of program manager, software project manager, and key product line and development resources to manage transition and stay on schedule. Project will be managed following CMM level 3 processes. Project schedule will be reviewed weekly with impacted groups and tracking & oversight provided to management. Schedule impacts will be addressed weekly and dates re-negotiated.
Participation Management	Exposure	The participation management system is not available come October 1, 2001.	Monitor progress of CPS contract changes. Extend Title IV WAN contract to continue to provide the services if necessary.
Participation Management	End-users	The participation management system is not available come October 1, 2001 and users encounter an interruption in their SFA services.	Monitor progress of CPS contract changes. Extend Title IV WAN contract to continue to provide the services if necessary.



Service	Risk	Description of Risk	Mitigation Strategy
Product Distribution	Schedule	Inability to negotiate a suitable task order change to have a contract in place by September 30.	Should time be insufficient to transition these products to the CPS, we would request that the TIVWAN contract be extended until such time that the task orders could be put into place. However, we believe, the time between March and September 2001 is sufficient to transition these established tasks to the CPS. The same vendor is involved with an understanding of the products and services required. NCS Pearson would not have to hire and train new staff; they would utilize the existing staff who were performing the work under the TIVWAN contract.
Product Distribution	Financial	There is a possibility that NCS Pearson would want to renegotiate these unit costs and that these costs might increase significantly.	If SFA were to determine that these unit costs were unacceptable, then we would have to consider other alternatives (such as breaking up the tasks and having other contractors be responsible for the mailing or for posting material to the website.).
Product Distribution	Benefits	Our user satisfaction may decline due to our recommended change to the process of not mailing out hardcopy diskettes and publications to new users.	If this were to happen, we would return to the previous practice.
Billing	Schedule	Recommendation to eliminate the Centralized Billing System is not approved by SFA, resulting in the need to further research an alternative option.	Ensure this business case provides clear, complete information regarding the benefits of eliminating the system.



Service	Risk	Description of Risk	Mitigation Strategy
Billing	Financial	<ul style="list-style-type: none">• The volume of enrollment transactions processed is higher than in previous years. This would result in additional operating costs for SFA.• The operating partner who takes over responsibility for processing SAIG enrollment data may charge a higher or lower price for these services	Be clear in the business case that the cost to SFA for providing free services to users is an estimate based on current volumes and prices.
Billing	Scope	The scope of this effort is limited to the products currently identified in the Title IV WAN system as user products. SFA may consider billing users for additional products in the future.	<p>Be clear in the scope of the business case.</p> <p>Provide a list of products as an attachment to the business case.</p>

9. Acquisition Strategy

Only one of the five services, SFA to the Internet, has a recommended solution which requires an acquisition. Of the remaining four, Participation Management and Product Distribution will need to be incorporated into the CPS contract; Billing will be eliminated; and FMS will pay the monthly mailbox charge for Lender (799) Reporting beginning October 1, 2001.

For the SFA to the Internet initiative, SFA developed software selection criteria to select and evaluate candidate software suppliers. An initial candidate supplier list was developed, and preliminary information gathered. Based on the preliminary information gathered, the number of suppliers was reduced to the top three-four candidates. Additional research was then performed on each of the top candidates and an eventual supplier selected.

The research performed validates that the bTrade.com software components EasyAccess2000, SecureManager2000 and SecurePortal2000 provide the functionality that SFA constituents require, and meets SFA architecture plans and future initiatives. NCS Pearson staff (with the support of bTrade.com) conducted an extensive evaluation of the bTrade.com software components.



10. Schedule/Milestones

The schedule and associated dates are still in the planning stage and subject to change.

#	Milestone	Start Date	End Date
SFA to the Internet			
1	Begin implementation project.	02/19/2001	02/19/2001
2	Implement test environment at the VDC.	04/02/2001	05/04/2001
3	Perform system integration.	07/09/2001	07/13/2001
4	Implement production environment at the VDC	06/01/2001	07/02/2001
5	Perform system testing.	07/15/2001	08/06/2001
6	Perform beta testing.	08/16/2001	08/31/2001
7	Production rollout.	08/31/2001	12/18/2001
Participation Management			
1	Authorization of this business case received.	03/01/2001	03/01/2001
2	Perform full and detailed development and product line requirements analysis on the tasks necessary to move system.	03/23/2001	03/23/2001
3	Define contract deliverables/modifications to the existing CPS contract.	03/23/2001	03/23/2001
4	Generate and submit draft project transition plan (i.e. resources, estimates size, cost, schedule, and constraints) for the transition.	03/23/2001	03/28/2001
5	Update and submit final project transition plan for the transition, incorporating comments from draft review.	03/29/2001	03/30/2001
6	Receive contract authorization for software/systems transition to CPS contract.	05/01/2001	05/01/2001
7	Begin software/systems transition tasks identified in the plan.	05/02/2001	05/18/2001
8	Test high level functionality of existing transitioned software/system.	09/01/2001	09/20/2001
9	Contract production deliverables transitioned to the existing CPS contract.	09/30/2001	09/30/2001
10	Full production Participation Management system is operational under CPS contract.	09/30/2001	09/30/2001



#	Milestone	Start Date	End Date
Product Distribution			
1	Receive authorization for CPS contract authorization	05/01/2001	05/01/2001
2	Report status progress to TIV WAN & CPS COTRs on a weekly basis	05/08/2001	09/30/2001
3	Select Transition Team	05/01/2001	05/04/2001
4	Create tracking summary of questions to derive requirements	05/02/2001	05/12/2001
5	Hold requirements meetings with ED & CPS	05/12/2001	05/12/2001
5	Prepare and submit System Transition Plan (includes requirements tracking document and project schedule)	05/07/2001	05/18/2001
6	Receive approval of System Transition Plan from SFA	05/21/2001	05/25/2001
7	Execute Plan	05/25/2001	09/14/2001
8	Hold Production Readiness Review (PRR)	09/21/2001	09/21/2001
10	CPS moves code into production	09/24/2001	09/30/2001
Billing			
1	Receive approval from SFA to eliminate Centralized Billing System	03/01/2001	03/09/2001
2	Select Shutdown Team	05/03/2001	05/08/2001
3	Create tracking summary for billing shutdown	05/10/2000	05/20/2001
4	Prepare System Shutdown Plan	5/20/2001	06/01/2001
5	Execute Plan	06/10/2001	9/14/2001
6	Move modified code for removal of billing code into production	9/24/2001	9/30/2001
Lender (799) Reporting			
1	Authorization of this business case received.	04/01/2001	04/30/2001
2	Make arrangements for FMS to be invoiced by GEIS for monthly mailbox charge.	05/01/2001	09/30/2001
3	FMS begins paying monthly mailbox charges.	10/1/2001	TBD